

Title (en)

Spatial de-aliasing of the 3-D Kirchhoff DMO operator

Title (de)

Beseitigung von Aliasing in der 3-D Kirchhoff DMO Operator

Title (fr)

Enlever l'aliasing spatiale de l'opérateur DMO de Kirchhoff à 3-D

Publication

**EP 0869375 B1 20041117 (EN)**

Application

**EP 98302529 A 19980401**

Priority

US 83263297 A 19970404

Abstract (en)

[origin: EP0869375A2] A method is disclosed for processing seismic survey data to generate an unaliased 3-D DMO operator using two dimensional sampling theory to the spatial traverse of the operator as well as to the temporal axis. First a continuous DMO operator is generated along the line segment (10) connecting a source (5) and a receiver (R) directed at an arbitrary azimuth relative to a biaxial output grid. The operator is discretized at spaced-apart sample points (such as 16,18,20,30) along the DMO aperture segment (10), the spacing (D) being equal to or less than the output grid dimensions (dx,dy). An exponentially tapered sinc filter function is applied to the samples which are then interpolated onto the output grid.  
<IMAGE>

IPC 1-7

**G01V 1/36**; **G01V 1/28**

IPC 8 full level

**G01V 1/36** (2006.01)

CPC (source: EP US)

**G01V 1/362** (2013.01 - EP US); **G01V 2210/522** (2013.01 - EP US)

Cited by

JP2002081327A; EP1160551A1; US2013080067A1; US8862408B2; US6517241B1; US6565255B2

Designated contracting state (EPC)

FR GB NL

DOCDB simple family (publication)

**EP 0869375 A2 19981007**; **EP 0869375 A3 20000223**; **EP 0869375 B1 20041117**; NO 981341 D0 19980324; NO 981341 L 19981005; US 5903515 A 19990511

DOCDB simple family (application)

**EP 98302529 A 19980401**; NO 981341 A 19980324; US 83263297 A 19970404